IN THE CLAIMS:

Please amend the claims, cancel claim 4 without prejudice, and add new claims 21 to 23 as follows:

1. (Currently Amended) [[A]] An isolated or purified sulfolobus expression vector comprising:
   (a) a sulfolobus origin of replication;
   (b) coding sequences for structural proteins, a coding sequence for the site-specific integrase and a packaging signal ~~from one of SSV1, SSV2 or pSSVx~~, wherein each of the structural protein coding sequences [[and]] the site-specific integrase coding sequence and the packaging signal are from one of SSV1, SSV2 or pSSVx and are operably linked to expression control sequences ~~and the packaging signal~~;
   (c) one or more selectable marker gene(s) encoding an essential protein of sulfolobus, operatively linked to sulfolobus expression control sequences; and
   (d) a sulfolobus promoter followed 3' by a restriction enzyme recognition site or a multiple cloning site for insertion of a gene of interest and the vector further comprises an optional 3' regulatory element.
2. (Currently Amended) The expression vector of claim 1, wherein the ~~coding sequence is an~~ origin of replication is from one of SSV1, SSV2, pSSVx [[and]] or pRN plasmids.
3. (Original) The expression vector of claim 1 or 2, wherein the vector contains the complete genome of SSV1, thereby providing said origin of replication, said packaging signal and said genes encoding the structural proteins and the integrase of SSV1.
4. (Cancel)
5. (Currently Amended) The expression vector ~~of anyone~~ of claim 1, wherein the ~~vector contains~~ essential protein is orotidine-5'-monophosphatase pyrophosphorlyase and orotidine-5'-monophosphatase decarboxylase ~~as selectable marker genes~~.
6. (Previously Amended) The expression vector of claim 1, wherein the vector contains ~~3' to the~~ a translation initiation site ~~of the~~ or a promoter for the

expression of the gene of interest ~~additional nucleic acid sequences so that the expressed protein has an N-terminal extension~~.

7. (Currently Amended) The expression vector of claim [[6]] 23, wherein the N-terminal extension is
   (a) a signal sequence directing the secretion of the expressed protein;
   (b) a tag for purification; or
   (c) a tag for specific detection.

8. (Currently Amended) The expression vector of claim 1, wherein the promoter for the expression of the gene of interest is a constitutive promoter, a promoter ~~selected from the group consisting~~ of ~~genes~~ a gene involved in central metabolism[[s and]] or information processing ~~including the promoters~~ , a promoter of [[the]] ribosomal subunits 16S, 23S rRNA or ~~the promoters of polymerases, transcription, replication or translation factors~~ a polymerase, transcription, replication or translation factor promoter.

9. (Previously Amended) The expression vector of claim 1, wherein the promoter for the expression of the gene of interest is an inducible promoter.

10. (Currently Amended) The expression vector of claim 9, wherein the inducible promoter is selected from the group consisting of (a) heat inducible promoters selected from the promoters of TF55alpha ~~Tf55alpha~~, TF55beta, TF55gamma, hsp20, or htrA, (b) cold inducible promoter[[s]] from TF55gamma and (c) ~~promoters~~ a promoter inducible by a carbon source.

11. (Previously Amended) The expression vector of claim 1, wherein the vector contains an additional expression cassette for a reporter protein, selected from the group consisting of β-galactosidase, luciferase, green fluorescent protein and variants thereof.

12. (Previously Amended) A shuttle vector comprising the sequences of the expression vector of claim 1 and additional sequences for propagation and selection in E. coli, wherein the additional sequences comprise
   (a) an E. coli ori of replication; and
   (b) a marker for selection in E. coli.

13. (Currently Amended) The shuttle vector of claim 12, wherein the marker [[of]] for selection is selected from the group consisting of ampicillin, kanamycin, chloramphenicol, tetracyclin, hygromycin, neomycin or methotrexate.

14. (Previously Amended) A host cell transformed with the expression vector of claim 1, wherein the host cell is E. coli or sulfolobus.

15. (Currently Amended) The host cell of claim 14, wherein the transformed expression vector ~~provides~~ has a gene encoding [[an]] a second essential protein.

16. (Original) The host cell of claim 14, wherein the host is deficient in expressing a fully functional version of said essential gene provided by the expression vector.

17. (Previously Amended) A method of producing a polypeptide comprising culturing the host cell of claim 14 under suitable conditions and isolating said (poly)peptide from the cells or the cell culture supernatant.

18. (Currently Amended) A method of generating infectious recombinant subviral particles composed of the structural proteins of SSV1 ~~and~~/or SSV2~~, having packaged the DNA of~~ and comprising the expression vector of claim 1, wherein the method has the steps of

    (a) introducing the ~~DNA of the~~ expression vector and the ~~DNA of~~ SSV1 or SSV2 into a host cell[[s]];

    (b) incubating the cells ~~for time and~~ under conditions sufficient to allow replication of SSV1 or SSV2 ~~and spreading in the cell culture~~; and

    (c) harvesting the ~~cell culture supernatant or the host cells~~ infectious recombinant subviral particles.

19. (Currently Amended) The ~~method of using the~~ expression vector of claim 1 ~~for gene silencing by expression~~ , further comprising a gene of interest which is transcribed into an RNAi or antisense RNA~~, wherein the vector contains a Sulfolobus promoter for transcription of a gene or parts of a gene either in antisense or sense orientation or in both orientation~~s.

20. (Previously Amended) A kit comprising

    (a) the vector of claim 1.

    (b) the host cell of claim 14, and/or

    (c) a host cell deficient in the expression of the essential protein of the vector of (a).

    in one or more containers.

21. (New) The expression vector of claim 1, wherein the selectable marker gene of (c) encodes an essential protein of Sulfolobus.

22. (New) The expression vector of claim 21, wherein the essential gene is a gene of the *de novo* nucleotide anabolism, a gene of the amino acid biosynthesis or a gene conferring antibiotic resistance.

23. (New) The expression vector of claim 6, wherein the vector comprises additional nucleic acid sequences 3' of the gene of interest so that the expressed protein has an N-terminal extension.